MEADOW MTN WATER SUPPLY 2016 Drinking Water Quality Report
For Calendar Year 2015

Public Water System ID: CO0207504

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact RACHEL BARKWORTH at 303-823-2318 with any questions about the Drinking Consumer Confidence Rule (CCR) or for public participation opportunities that may affect the water quality.

General Information

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit http://wqcdcompliance.com/ccr. The report is located under "Source Water Assessment Reports", and then "Assessment Report by County". Select BOULDER County and find 207504; MEADOW MTN WATER SUPPLY or by contacting RACHEL BARKWORTH at 303-823-2318. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

Source	Source Type	Water Type	Potential Source(s) of Contamination
WILLOW CREEK	Intake	Surface Water	
FOX CREEK	Intake	Surface Water	

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** − The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** − A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL)** − The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Maximum Residual Disinfectant Level (MRDL)** − The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Contaminant Level Goal (MCLG)** − The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** − The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Violation (No Abbreviation)** − Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** − Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** − Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** − Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** − Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** − Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** − Typical value.
- **Range (R)** − Lowest value to the highest value.
- **Sample Size (n)** − Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** − One part per million corresponds to one minute in two years or a single penny in $10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** − One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.

Detected Contaminants

MEADOW MTN WATER SUPPLY routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2015 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Summary of Disinfectants Sampled in the Distribution System						
Contaminant Name	**Month**	**Results**	**Sample Size**	**TT Requirement**	**TT Violation**	**Typical Sources**
Chlorine		Lowest monthly percentage of samples meeting TT requirement: [100]%		For any two consecutive months, At least 95% of samples (per month) must be detectable	Yes	Water additive used to control microbes

Lead and Copper Sampled in the Distribution System								
Contaminant Name	**Time Period**	**90th Percentile**	**Sample Size**	**Unit of Measure**	**90th Percentile AL**	**Sample Sites Above AL**	**90th Percentile AL Exceedance**	**Typical Sources**
Copper	06/23/2013 to 06/23/2013	0.3	5	ppm	1.3		No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/23/2013 to 06/23/2013	23	5	ppb	15	1	Yes	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System										
Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**Highest Compliance Value**	**MCL Violation**	**Typical Sources**
Total Haloacetic Acids (HAA5)	2015	51.35	51.35 to 51.35	1	ppb	60	N/A		No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2015	37.7	37.7 to 37.7	1	ppb	80	N/A		No	Byproduct of drinking water disinfection

Summary of Turbidity Sampled at the Entry Point to the Distribution System					
Contaminant Name	**Sample Date**	**Level Found**	**TT Requirement**	**TT Violation**	**Typical Sources**
Turbidity	Date/Month: Sep	Highest single measurement: 0.043 NTU	Maximum 0.5 NTU for any single measurement	No	Soil Runoff
Turbidity	Month: Dec	Lowest monthly percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.1 NTU	No	Soil Runoff

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Gross Alpha	2011	0.03	0.03 to 0.03	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2011	0.34	0.34 to 0.34	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2011	0.1	0.1 to 0.1	1	ppb	30	0	No	Erosion of natural deposits

Secondary Contaminants** **Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.						
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**Secondary Standard**
DICHLOROACETIC ACID	2015	33.24	33.24 to 33.24	1	N/A	
MONOCHLOROACETIC ACID	2015	1.25	1.25 to 1.25	1	N/A	
TRICHLOROACETIC ACID	2015	16.86	16.86 to 16.86	1	N/A	

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure

***More information about the contaminants that were included in UCMR3 monitoring can be found at: http://www.drinktap.org/water-info/whats-in-my-water/unregulated-contaminant-monitoring-rule.aspx. Learn more about the EPA UCMR at: http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/contact.cfm.

Violations, Significant Deficiencies, and Formal Enforcement Actions

Violations

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
DBP GROUP	MONITORING, ROUTINE (DBP), MAJOR - MONITORING & REPORTING	01/01/2015 - 12/31/2015	N/A	N/A	N/A
CHLORINE	RES DISINFECT CONCENTRATION (SWTR) - TREATMENT TECHNIQUE	06/01/2015 - 06/30/2015	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and	0 MG/L	MG/L

			nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.		
CHLORINE	RES DISINFECT CONCENTRATION (SWTR) - TREATMENT TECHNIQUE	05/01/2015 - 05/31/2015	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	0 MG/L	MG/L
CHLORINE	RES DISINFECT CONCENTRATION (SWTR) - TREATMENT TECHNIQUE	04/01/2015 - 04/30/2015	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.	0 MG/L	MG/L

Additional Violation Information

Note: If any violation relates to failing to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes then the water may be inadequately treated. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Explanation of the violation(s) and the steps taken to resolve them:

DBP Violation was caused by taking the sample in September instead of August when the sample is required by the CDPHE. Water Plant Operator will ensure that all future samples will be taken per the required schedule. There were no issues with the actual results; the test should simply have been performed in early August instead of early September.

Chlorine violations in April, May and June of 2015 were caused by requirements from CDPHE to change our routine monitoring to a different process that was not workable for our water plant due to the fact that we do not have 24/7 operations, and therefore could not ensure that the data monitoring PC for water flow was working 24/7. The PC would regularly stop monitoring due to electrical power surges and outages; therefore the data was not available to provide consistent results. In discussion with the State Engineers at CDPHE is was agreed that MMWSC would return to the previous regular chlorine concentrations requirements of 1.2 mg/l at the Water Treatment Plant instead of having to require the more detailed calculations using water volume of the clear well, pH readings, temperature and flow rates. This has enabled us to maintain our compliance for Chlorine content in the water, but it does mean that chlorine levels have to be at least 1.2 mg/l at the water treatment plant because the final chlorine residual requirements require MMWSC to have at least 0.2mg/l of chlorine residual at the end points of the distribution system. This level ensures adequate disinfection of our water. This may have caused some people this year to think that our water tastes/smells of chlorine more than it used to. The more detailed calculations would allow MMWSC to reduce the amount of chlorine added to the water. Our ultimate requirement is 0.2 mg/l Chlorine Residual in the water at the distribution system end points. To achieve this requirement we found that the chlorine content at the plant has to be at least 1.2 mg/l to allow us to maintain 0.2 mg/l at the distribution system end points system.